What is claimed is ;

1. A method for color processing realized by a color processing apparatus, which comprises a color table for storing a plurality of color data, and a cache memory for caching part of the color data, the method comprising the steps of:

issuing a color index;

returning at least one of the color data corresponding to the color index if the at least one of the color data is cached in the cache memory; and

returning at least one of the color data from the color table if the at least one of the color data is not cached in the cache memory.

2. The method for color processing of claim 1, wherein the color table and the cache memory are in the different devices.

3. The method for color processing of claim 1, further comprising:

writing the at least one of the color data corresponding to the color index into the cache memory from the color table if the at least one of color data is not cached in the cache memory.

4. The method for color processing of claim 3, further comprising:

writing a portion of the color data similar to the at least one of the color data corresponding to the color index into the cache memory from the color table if the at least one of the color data corresponding to the color index is not cached in the cache memory.

5. An apparatus for color processing, comprising:

a memory for storing at least a color table comprising a plurality of color data; and

a color processing module coupled to the memory, comprising:

a cache for storing at least one of the color data selected from the color table; and

a color processor, coupled to the cache, for performing color conversions and operations;

wherein the color processor issues a color index to search for a corresponding color data from the cache, and the corresponding color data is loaded from the color table into the cache if the corresponding color data is not found in the cache.

6. The apparatus for color processing of claim 5, wherein the memory is independent of the cache.

7. The apparatus for color processing of claim 5, wherein, while the corresponding color data is loaded from the memory into the cache, a portion of the color data similar to the corresponding color data are also loaded into the cache.

8. The apparatus for color processing of claim 5, wherein the cache comprises:

a cache controller, coupled to the memory, for loading the corresponding one of the color data from the memory into the cache if the corresponding color data is not found in the cache.

9. An apparatus for accelerating color processing coupled to an external color table storing a plurality of color data, comprising:

a color processor performing color conversions and operations; and

a cache coupling the color table and the color processor and storing at least one of the color data selected from the color table;

wherein the color processor issues a color index to search for a corresponding color data from the cache, and the corresponding color data is loaded from the color table into the cache if the corresponding one of the color data is not found in the cache.

10. The apparatus for accelerating color processing of claim 9, wherein the color table and the cache memory are in the different devices.

11. The apparatus for accelerating color processing of claim 9, wherein, while the corresponding color data is loaded from the color table into the cache, a portion of the color data similar to the corresponding color data are

also loaded into the cache.

12. The apparatus for accelerating color processing of claim 9, wherein the cache further comprises:

a cache controller, coupled to the color table, for loading the corresponding color data from the color table into the cache if the corresponding color data is not found in the cache.